IN THE CLAIMS

Claims 1-35 are canceled without prejudice or disclaimer of the subject matter thereof.

Please add new claims 36-57 as follows:

36. (New) A method for modulating the perception of satiety in a subject, said method comprising administering to said subject an effective amount of an agent selected from the group consisting of an agonist of a mechanoreceptor, an antagonist of a mechanoreceptor, an inhibitor of expression of a gene encoding a mechanoreceptor and an enhancer of the expression of a gene encoding a mechanoreceptor wherein said agent changes the perception of satiety in said subject.

37. (New) The method of claim 36, wherein said mechanoreceptors are selected from the group consisting of ENAC, βENAC, γENAC, ACCN3, ACCN4, ASIC1, ASIC2, ASIC3, ASIC4, BLINAC/hiNaC (ACCN5), TREK1, TREK2, TRAAK (KCNK4), SCNN1C, KCNK2, TRPM1, TRPM2, TRPM3, TRPM4, TRPM6, TRPM7, TRPM8, TRPC1, TRPC2, TRPC3, TRPC4, TRPC6, TRPV2, TRPV3, TRPV6 and TRPM8.

38. (New) The method of claim 37, wherein said mechanoreptors are selected from the group consisting of TRPV2, ACCN5, TRPM1, TRPM4, TRPV6 and TRPV4.

39. (New) The method of claim 38, wherein said mechanoreceptor is TRPV2.

40. (New) The method of claim 36, wherein said agonist of a mechanoreceptor promotes the perception of satiety.

41. (New) The method of claim 36, wherein said antagonist of a mechanoreceptor reduces the perception of satiety.

42. (New) The method of claim 41, wherein said antagonist is of TRPV2.

43. (New) The method of claim 42, wherein said antagonist of TRPV2 is selected from the group consisting of 1-[β-[3-(4-methoxyphenyl)propoxy]-4-methoxyphenethyl]-1H-imidazole, ruthenium red dye and salts, homologs,

orthologs, analogs, isomers, enantiomers, derivatives and functional equivalents thereof.

44. (New) The method of claim 43, wherein said ruthenium red dye is selected from the group consisting of ruthenium (6t), tetradecaaminedi-m-oxotrihexachloride, a trans (8Cl) isomer of tetradecaaminedi-m-oxotrihexachloride , an enantiomer of tetradecaaminedi-m-oxotrihexachloride, an ammoniated ruthenium oxychloride, a steroisomer of ammoniated ruthenium oxychloride and an enantiomer of ammoniated ruthenium oxychloride.

45. (New) The method of claim 36, wherein the subject is selected from the group consisting of a mammal.

46. (New) The method of claim 45, wherein said mammal is selected from the group consisting of a primate, a human and a laboratory test animal.

47. (New) A composition used to modulate the perception of satiety in a subject, said composition selected from the group consisting of an agonist of a mechanoreceptor, an antagonist of a mechanoreceptor, an inhibitor of the expression of a gene encoding a mechanoreceptor and an enhancer of the expression of a gene encoding a mechanoreceptor and a pharmaceutically acceptable carrier or diluent.

48. (New) The composition of claim 47, wherein said mechanoreceptors are selected from the group consisting of ENAC, βENAC, γENAC, ACCN3, ACCN4, ASIC1, ASIC2, ASIC3, ASIC4, BLINAC/hiNaC (ACCN5), TREK1, TREK2, TRAAK (KCNK4), SCNN1C, KCNK2, TRPM1, TRPM2, TRPM3, TRPM4, TRPM6, TRPM7, TRPM8, TRPC1, TRPC2, TRPC3, TRPC4, TRPC6, TRPV2, TRPV3, TRPV6 and TRPM8.

49. (New) The composition of claim 48, wherein said antagonist is of TRPV2.

50. (New) The composition of claim 49, wherein said antagonist of TRPV2 is selected from the group consisting of 1-[β-[3-(4-methoxyphenyl)propoxy]-4-methoxyphenethyl]-1H-imidazole, ruthenium red dye and salts, homologs,

orthologs, analogs, isomers, enantiomers, derivatives and functional equivalents thereof.

51. (New) The composition of claim 50, wherein said ruthenium red dye is selected from the group consisting of ruthenium (6t), tetradecaaminedi-m-oxotrihexachloride, a trans (8Cl) isomer of tetradecaaminedi-m-oxotrihexachloride , an enantiomer of tetradecaaminedi-m-oxotrihexachloride, an ammoniated ruthenium oxychloride, a steroisomer of ammoniated ruthenium oxychloride and an enantiomer of ammoniated ruthenium oxychloride.

52. (New) A method comprising;

administering to an animal an effective amount of a compound selected from the group consisting of a calcium uptake inhibitor, a calcium uptake promoter, a blocker of TRPV2 calcium channels and a promoter of TRPV2 calcium channels and a biological dye which alters calcium uptake in order to ameliorate one or more symptoms from a disease selected from the group consisting of obesity, anorexia, need of satiation, weight maintenance conditions, metabolic energy levels and inflammatory disease.

53. (New) The method of claim 52, wherein said alteration of calcium uptake is selected from the group consisting of an inhibition and a promotion.

54. (New) The method of claim 52, wherein said the compound is selected from the group consisting of 1-[β-[3-(4-methoxyphenyl)propoxy]-4-methoxyphenethyl]-1H-imidazole, a ruthenium red dye and salt, homolog, ortholog, analog, isomer, enantiomer, derivative or functional equivalent thereof.

55. (New) The method of claim 52, wherein said animal is a mammal.

56. (New) The method of claim 52, wherein said compounds modulate calcium ion uptake in cells of the stomach wall.

57. (New) The method of claim 56, wherein said cells are neuronal cells of the myenteric plexus.